ISSN 2226-0773

HUMANITY SPACE
INTERNATIONAL ALMANAC

ГУМАНИТАРНОЕ ПРОСТРАНСТВО
МЕЖДУНАРОДНЫЙ АЛЬМАНАХ

Volume 15, No 3
Том 15, № 3
2026

http://www.humanityspace.net
http://www.гуманитарноепространство.рф

ISSN 2226-0773

ISSN 2226-0773

HUMANITY SPACE
INTERNATIONAL ALMANAC

ГУМАНИТАРНОЕ ПРОСТРАНСТВО
МЕЖДУНАРОДНЫЙ АЛЬМАНАХ

Volume 15, No 3
Том 15, № 3

БИОЛОГИЧЕСКИЕ НАУКИ / BIOLOGICAL SCIENCES

2026

Гуманитарное пространство. ***Международный альманах*** **ТОМ 15, № 3, 2026**
Humanity space. ***International almanac*** **VOLUME 15, No 3, 2026**

Главный редактор / Chief Editor: **М.А. Лазарев / M.A. Lazarev**
Дизайн обложки / Cover Design: **М.А. Лазарев / M.A. Lazarev**
E-mail: **humanityspace@gmail.com**

Научный редактор / Scientific Editor: **В.П. Подвойский / V.P. Podvoysky**
E-mail: **9036167488@mail.ru**

Веб-сайт / Website: **http://www.humanityspace.net**
http://www.гуманитарноепространство.рф

Издательство / Publishers:
Международная академия образования / International Academy of Education
121433, Россия, г. Москва, ул. Большая Филёвская, 28, корп. 2
Bolshaya Filevskaya str., 28, building 2, Moscow 121433 Russia

Напечатано / Printed by:
ООО «АЕГ Груп» / A.E.G. Group
125009, г. Москва, Тверская улица, 27, строение 1, подъезд 2
Tverskaya str., 27, building 1, approach 2, Moscow 125009 Russia
Постер-МГУ / Poster-MSU
119296, г. Москва, ул. Молодежная, 3
Molodezhnaya, 3, Moscow 119296 Russia

Дата выпуска / Date of issue: **17.04.2026**
Реестр / Register: **ISSN 2226-0773**
DOI: 10.5281/zenodo.19627291
EDN: BRAFJB

Cover photo: *Carabus* (*Procerus*) *scabrosus lyciacus* Kozlov, **ssp. n.**: Holotype, male, Turkey, Mediterranean region, Muğla province, Seydikemer district, valley near the border of Seki town environs, H=1250 m a.s.l., 28/V-6/VI/2005, D. Prunier leg. - collection of Anton O. Kozlov (Moscow, Russia). Photo by Dmitry D. Fominykh (Moscow, Russia).

© Гуманитарное пространство**.** *Международный альманах*
Humanity space. *International almanac*
составление, редактирование
compiling, editing

РЕДАКЦИОННАЯ КОЛЛЕГИЯ

Алексеева Лариса Леонидовна
доктор педагогических наук, доцент, почётный работник науки и техники РФ
Московский государственный институт культуры

Баршевскис Арвидс (Латвия)
академик Латвийской академии наук, доктор биологических наук, профессор
Даугавпилсский университет

Блок Олег Аркадьевич
доктор педагогических наук, профессор
Московский государственный институт культуры
Президент отделения «Музыкальное искусство и образование» Международной академии информатизации при ООН

Борц Анна (Польша)
доктор искусствоведения
Вроцлавский университет экологических и биологических наук
Институт ландшафтной архитектуры

Бочкарёва Екатерина Дмитриевна
кандидат педагогических наук
Московский государственный институт культуры

Губин Александр Игоревич
кандидат биологических наук
Донецкий ботанический сад

Данилевский Михаил Леонтьевич
кандидат биологических наук
Институт Проблем Экологии и Эволюции им. А.Н. Северцова РАН

Делий Павел Юрьевич
кандидат педагогических наук, профессор
Московский государственный институт культуры

Дуккон Агнеш (Hungary)
доктор филологических наук, профессор
Будапештского Университета им. Лоранда Этвеша (ELTE)
Венгерская Академия Наук (по венгерской литературе ренессанса и барокко)

Жаркова Алёна Анатольевна
доктор педагогических наук, профессор, профессор Российской академии образования
Московский государственный институт культуры

Жарков Анатолий Дмитриевич
академик Российской академии естественных наук, доктор педагогических наук, профессор, заслуженный работник культуры РФ
Московский государственный институт культуры

Илларионова Людмила Петровна
доктор педагогических наук, профессор
Государственный университет просвещения

Кадников Виталий Валерьевич
кандидат биологических наук
Институт биоинженерии, ФИЦ Биотехнологии Российской академии наук

Калимуллина Ольга Анатольевна
доктор педагогических наук, профессор, член-корреспондент Российской академии образования
Поволжский государственный университет физической культуры, спорта и туризма

Малянов Евгений Анатольевич
доктор педагогических наук, профессор
Пермский государственный институт культуры

Москвина Анна Сергеевна
кандидат педагогических наук, доцент
Государственный университет просвещения

Овечко Николай Николаевич
кандидат биологических наук, старший научный сотрудник
Научно-исследовательский институт вакцин и сывороток имени И.И. Мечникова Российской академии наук

Оленев Святослав Михайлович
доктор философских наук, профессор
Московская государственная академия хореографии

Печко Лейла Петровна
доктор философских наук, профессор

Пирязева Елена Николаевна
кандидат искусствоведения
Центр развития дополнительного образования Российской академии образования

Подвойский Василий Петрович
доктор педагогических наук, кандидат психологических наук, профессор

Поль Дмитрий Владимирович
доктор филологических наук, профессор
Московский педагогический государственный университет

Полюдова Елена Николаевна (США: Калифорния)
кандидат педагогических наук
Окружная библиотека Санта Клара

Сёке Каталин (Венгрия)
кандидат филологических наук, доцент
Института Славистики Сегедского университета

Солодухин Владимир Иосифович
доктор педагогических наук, профессор
Санкт-Петербургский гуманитарный университет профсоюзов

Солодухина Татьяна Константиновна
доктор педагогических наук, профессор
Санкт-Петербургский гуманитарный университет профсоюзов

Щербакова Анна Иосифовна
доктор педагогических наук, доктор культорологии, профессор
Московский государственный институт имени А.Г. Шнитке

EDITORIAL BOARD

Alekseeva Larisa Leonidovna
Dr. of Pedagogical Sciences, Associate Professor, Honorary Worker of Science and Technology of the Russian Federation
Moscow State Institute of Culture

Barševskis Arvids (Latvia)
Academician of Latvian Academy of Science, Dr. of Biological Sciences, Professor
Daugavpils University

Blok Oleg Arkadevich
Dr. of Pedagogical Sciences, Professor
Moscow State University of Culture
President of the Department of Music and Education of the International Academy of Informatization at the United Nations

Borch Anna (Poland)
Dr. of Art Criticism
Wroclaw University of Environmental and Life Sciences
Institute of Landscape Architecture

Bochkareva Ekaterina Dmitrievna
PhD of Pedagogical Sciences
Moscow State Institute of Culture

Danilevsky Mikhail Leontevitch
PhD of Biological Sciences
A.N. Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences

Dely Pavel Yurevich
PhD of Pedagogical Sciences, Professor
Moscow State University of Culture

Dukkon Ágnes (Hungary)
Dr.of Phylological Sciences, Professor
Budapest University named after Eötvös Loránd (ELTE)
Hungarian Academy of Sciences (in Hungarian literature, Renaissance and Baroque)

Gubin Alexandr Igorevich
PhD of Biological Sciences
Donetsk Botanical Garden

Illarionova Lyudmila Petrovna
Dr.of Pedagogical Sciences, Professor
State University of Education

Kadnikov Vitaly Valerevich
PhD of Biological Sciences
Institute of Bioengineering, Federal Research Center "Fundamentals of Biotechnology" of the Russian Academy of Sciences

Kalimullina Olga Anatolievna
Dr.of Pedagogical Sciences, Professor, Corresponding Member of the Russian Academy of Education
Volga Region State University of Physical Culture, Sports and Tourism

Malyanov Evgeniy Anatolevich
Dr.of Pedagogical Sciences, Professor
Perm State Institute of Culture

Moskvina Anna Sergeevna
PhD of Pedagogical Sciences, Associate Professor
State University of Education

Ovechko Nikolay Nikolaevich
PhD of Biological Sciences, Senior Researcher
I.I. Mechnikov Scientific Research Institute of Vaccines and Serums of the Russian Academy of Sciences

Olenev Svyatoslav Mikhaylovich
Dr. of Philosophical Sciences, Professor
Moscow State Academy of Choreography

Pechko Leyla Petrovna
Dr. of Philosophical Sciences, Professor

Piryazeva Elena Nikolaevna
PhD of Art Criticism
Center for Development of Continuing Education of the Russian Academy of Education

Podvoysky Vasily Petrovich
Dr. of Pedagogical Sciences, PhD of Psychological Sciences, Professor

Pole Dmitriy Vladimirovich
Dr. of Philological Sciences, Professor
Moscow State Pedagogical University

Polyudova Elena Nikolayevna (USA: California)
PhD of Pedagogical Sciences
Santa Clara County Library

Shcherbakova Anna Iosifovna
Dr. of Pedagogical Sciences, PhD of Culturological Sciences, Professor
Moscow State Institute of Music named A.G. Schnittke

Solodukhin Vladimir Iosifovich
Dr.of Pedagogical Sciences, Professor
St. Petersburg Humanitarian University of Trade Unions

Solodukhina Tatyana Konstantinovna
Dr.of Pedagogical Sciences, Professor
St. Petersburg Humanitarian University of Trade Unions

Szoke Katalin (Hungary)
PhD of Philological Sciences, assistant professor
Institute of Slavic Studies of the University of Szeged

Zharkova Alena Anatolevna
Dr. of Pedagogical Sciences, Professor, Professor of the Russian Academy of Education
Moscow State University of Culture

Zharkov Anatoliy Dmitrievich
Academician of the Russian Academy of Natural Sciences, Dr. of Pedagogical Sciences, Professor, Honored Worker of Culture of the Russian Federation
Moscow State University of Culture

Humanity space *International almanac* VOL. 15, No 3, 2026: 182-208
Гуманитарное пространство *Международный альманах* ТОМ 15, № 3, 2026: 182-208
https://zoobank.org/References/11780FE8-40A2-476C-A21E-88874472E545
DOI: 10.24412/2226-0773-2026-15-3-182-208
EDN: OSDGKQ

Description of three new subspecies of *Carabus* (*Procerus*) *scabrosus* Olivier, 1789 from Central and Mediterranean Turkey (Coleoptera, Carabidae)

A.O. Kozlov

Moscow 117418 Russia
e-mail: kant.klintsy@gmail.com
ORCID 0000-0002-6002-4261

Key words: Coleoptera, Carabidae, taxonomy, zoogeography, new subspecies, Turkey.
Abstract. Based on studied material, three new subspecies of *Carabus* (*Procerus*) *scabrosus* Olivier, 1789 are described: *C.* (*P.*) *scabrosus aksaraicus* **ssp. n.** from Aksaray city environs; *C.* (*P.*) *scabrosus anahitae* **ssp. n.** from Niğde city environs; and *C.* (*P.*) *scabrosus lyciacus* **ssp. n.** from Muğla province, Seydikemer district.

Introduction

Regarding the subgenus *Procerus*, Central and Mediterranean Turkey remain rather poorly studied. Records of beetles of this subgenus are rare and sporadic (Fig. 1). Cavazzuti in his “Monografia del Genere *Procerus* (Coleoptera, Carabidae, Carabini)” (1989) described *Carabus* (*Procerus*) *scabrosus estegeicus* (originally as *Carabus* (*Procerus*) *sommeri estegeicus*), *locus typicus*: Isparta, Davraz Dağı, with no specimens from Aksaray in the type series. Cavazzuti in his catalogue "Fauna dei Carabini di Turchia - III" (2017) writes that *Carabus* (*Procerus*) *scabrosus estegeicus* also inhabits the environs of Aksaray city. Among the paratypes of *C.* (*P.*) *s. estegeicus* there is a female, figured in Cavazzuti (1989) on Plate IV under number 5: “Anatolia Sud-occ., Muğla vil.: Nord di Kemer, V-1986, Lassalle leg.” (coll. Lassalle)

During comparative studies, it was discovered that the population in the environs of Aksaray city represents a new undescribed subspecies with notable differences from the described *Carabus* (*Procerus*) *scabrosus estegeicus* from Isparta, Davraz Dağı. The aforementioned female from the paratype series also belongs to a different subspecies, which is likewise described in this article.

Fig. 1. Distribution map of the studied *Carabus* (*Procerus*) *scabrosus* Olivier, 1789 and *C.* (*P.*) *syriacus* Kollar, 1843 in Central and Mediterranean Turkey: *C.* (*P.*) *scabrosus*: 1. Isparta distr., Davraz Dağı; 2. Aksaray env., H=980-1080 m a.s.l.; 3. Niğde env., H=1200-1420 m a.s.l.; 8. Muğla prov., Seydikemer distr., Seki env., H=1250 m a.s.l. *C.* (*P.*) *syriacus:* 4. Niğde prov., Ulukışla env., H=1600 m a.s.l.; 5. Adana prov., Karataş distr., Çavuşlu vill. env.; 6. Mersin prov., Çamlıyayla distr., Sebil vill. env., H=1080 m a.s.l.; 7. Karaman env.

According to Kashima (2002), who studied environmental and climatic changes at Lake Tuz, we have the following: Lake Tuz 20,000-13,000 years ago had its shoreline directly at the present-day city of Aksaray. Lake Tuz and the Konya Basin for many thousands of years were large, natural impassable barriers for the dispersal of flightless insects, particularly *Carabus* (*Procerus*). Approximately 13,000 years ago, these water bodies began to recede due to global climate change; the residual marshlands and small salt lakes continued to serve as natural obstacles for the dispersal of flightless insects in Central Turkey. Thus, *Carabus* (*Procerus*) populations west of the Konya Basin and east of Lake Tuz have been isolated from each other for a considerable time and during this period have acquired a specific set of characters, which allows distinguishing and describing new taxa in this work.

This article follows the classification of Deuve (2021).

Material and methods

Standard methods were applied for processing the material.

Photographs of the habitus were taken using a Nikon D800 camera with an AF-S Micro NIKKOR 60 mm 1:2.8 G ED macro lens by D.D. Fominykh. Photographs of aedeagi were taken using a Canon EOS 5D Mark IV camera with a Canon MP-E 65 mm f/2.8 1-5x lens by I.A. Zabaluev. To increase the depth of field of the photographs, image stacking technology was applied using the Zerene Stacker software by I.A. Zabaluev. External characters were studied with a Bresser Advance ICD microscope 10×-160×. Live and biotope photographs were taken by the author.

Measurements were taken using calipers as follows: total body length (TBL), measured from the tips of mandibles to the elytral apex; length of elytra (EL), measured from the basal border in the scutellar region to the apex of the sutural angle; maximum width of the elytra (EW), measured at their broadest point; maximum width of pronotum (PW), measured at its broadest point; length of pronotum (PL), measured along its median line; minimum width of pronotum (PM), measured at its narrowest point near the hind angles. The following ratios were also calculated: EW/EL, PW/PL, PL/PM (Fig. 38).

The names of the morphological structures of beetles

generally follow those given by Cavazzuti (1989).

The following acronyms are used for the depositories of the specimens examined:
AK - collection of Anton O. Kozlov (Moscow, Russia);
DF - collection of Dmitry D. Fominykh (Moscow, Russia);
ZISP - Zoological Institute of Russian Academy of Sciences (St. Petersburg, Russia);
ZMMU - Zoological Museum of Moscow State University (Moscow, Russia).

Results

Comparative material

Carabus (*Procerus*) *scabrosus estegeicus* Cavazzuti, 1989 (Figs 17, 35): 1 ♂ (AK), Turkey, Isparta province, Isparta district, Davraz Dağı, 20/V/1997, R. Minetti coll.

TBL: 45.0 mm. EL: 27.4 mm. EW: 17.6 mm. PW: 12.2 mm. PL: 10.1 mm. PM: 9.0 mm. EW/EL: 0.64. PW/PL: 1.21. PL/PM: 1.12.

Carabus (*Procerus*) *syriacus kozloviorum* Cavazzuti & Kozlov, 2014 (Figs 14-16, 18-19, 32-34, 45-47): 5 ♂♂, 2 ♀♀ (AK), Turkey, Central Anatolia region, Niğde province, Ulukışla town environs, H=1600 m a.s.l., V/2025, A. Kozlov & R. Gortovanny leg.

TBL: ♂♂ 38.6-44.5 mm; ♀♀ 44.0-47.1 mm. EL: ♂♂ 23.6-27.0 mm; ♀♀ 28.0-29.0 mm. EW: ♂♂ 15.6-19.0 mm; ♀♀ 18.8-19.7 mm. PW: ♂♂ 10.5-12.4 mm; ♀♀ 11.0-12.8 mm. PL: ♂♂ 8.7-10.0 mm; ♀♀ 9.0-10.5 mm. PM: ♂♂ 8.0-9.0 mm; ♀♀ 9.0-9.6 mm. EW/EL: ♂♂ 0.67-0.71; ♀♀ 0.67-0.70. PW/PL: ♂♂ 1.20-1.33; ♀♀ 1.20-1.22. PL/PM: ♂♂ 1.00-1.15; ♀♀ 1.00-1.09.

Carabus (*Procerus*) *syriacus ludademae* Cavazzuti & Kozlov, 2014 (Figs 21, 24, 37): 3 ♂♂, 1 ♀ (AK), Turkey, Central Anatolia region, Karaman province, Karaman city environs, IV-V/2022, local people leg.

TBL: ♂♂ 41.1-44.2 mm; ♀ 48.0 mm. EL: ♂♂ 25.5-26.9 mm; ♀ 29.4 mm. EW: ♂♂ 17.0-18.8 mm; ♀ 20.5 mm. PW: ♂♂ 12.1-13.1 mm; ♀ 13.7 mm. PL: ♂♂ 8.4-10.0 mm; ♀ 10.0 mm. PM: ♂♂ 8.0-9.5 mm; ♀ 9.8 mm. EW/EL: ♂♂ 0.68-0.70; ♀ 0.70. PW/PL: ♂♂ 1.31-1.44; ♀ 1.37. PL/PM: ♂♂ 1.00-1.06; ♀ 1.02.

Carabus (*Procerus*) *syriacus toulgoetianus* Deuve, 2002 (Figs 22, 25): 1 ♂, 1 ♀ (DF), Turkey, Mediterranean region, Adana province, Karataş district, Çavuşlu village environs, V/2014, A. Kozlov & R. Gortovanny leg.

TBL: ♂ 46.0 mm; ♀ 49.8 mm. EL: ♂ 27.7 mm; ♀ 30.7 mm. EW: ♂ 19.0 mm; ♀ 21.0 mm. PW: ♂ 14.7 mm; ♀ 14.8 mm. PL: ♂ 11.0 mm; ♀ 10.2 mm. PM: ♂ 9.6 mm; ♀ 10.4 mm. EW/EL: ♂ 0.69; ♀ 0.68. PW/PL: ♂ 1.34; ♀ 1.45. PL/PM: ♂ 1.15; ♀ 0.98.

Carabus (*Procerus*) *syriacus bulgharmaadensis* Bodemeyer, 1915 (Fig. 23): 1 ♀ (AK), Turkey, Mediterranean region, Mersin province, Çamlıyayla district, near Sebil village, Cehennem Deresi Gorge, H=1080 m a.s.l., 30-31/V/2010, D. Kasatkin leg.

TBL: 50.3 mm. EL: 30.5 mm. EW: 20.0 mm. PW: 13.0 mm. PL: 10.4 mm. PM: 9.2 mm. EW/EL: 0.66. PW/PL: 1.25. PL/PM: 1.13.

***Carabus* (*Procerus*) *scabrosus aksaraicus* Kozlov, ssp. n.**

Figs 2-7

Description. TBL: ♂♂ 40.0-44.5 mm; ♀♀ 44.5-47.0 mm. EL: ♂♂ 24.2-27.7 mm; ♀♀ 28.0-29.2 mm. EW: ♂♂ 16.0-18.0 mm; ♀♀ 18.3-19.3 mm. PW: ♂♂ 10.4-13.0 mm; ♀♀ 11.7-13.1 mm. PL: ♂♂ 8.0-9.5 mm; ♀♀ 9.2-10.0 mm. PM: ♂♂ 7.7-10.0 mm; ♀♀ 9.0-10.2 mm. EW/EL: ♂♂ 0.63-0.69; ♀♀ 0.65-0.68. PW/PL: ♂♂ 1.22-1.38; ♀♀ 1.21-1.31. PL/PM: ♂♂ 0.94-1.10; ♀♀ 0.98-1.05.

Large taxon, body length of males 40.0-44.5 mm, body length of females 44.5-47.0 mm. Elytral width at the broadest part in males 16.0-18.0 mm; in females 18.3-19.3 mm. Ventral surface of body black, with distinct metallic luster laterally; dorsal surface with metallic luster, color usually blue-violet or violet, rarely with blue-green tints.

Head large, surface with coarse rugose punctuation and deep longitudinal grooves. Ventral surface of head black. Mentum, submentum, and eye bases blue-violet. Mandibles well developed, smooth. Mandible apices moderately curved. Antennae in males longer than pronotum by 3-3.5 apical segments, in females longer by 2-2.5 segments. Median tooth of mentum acute, short.

Pronotum transverse (in males PW/PL = 1.22-1.38; in females

PW/PL = 1.21-1.31), with coarse rugose punctuation. Pronotal margin beaded and more clearly defined towards the basal part. The pronotal base wider than the anterior part. Basal foveae weakly defined, in most specimens connected by a light impression. Ventral surface of pronotum from blue-violet to metallic green, prosternal process smooth and black, but closer to the neck a blue-violet luster appears.

Mesosternum black with light blue-green tint. Mesepisternum and mesepimeron, as well as metepisternum, entirely metallic, varying from violet to blue-violet with greenish tints. Median line of pronotum, when present, weakly defined; in most specimens completely absent. Elytra moderately broad, convex, short, ovate, elytral apex rounded. Elytral sculpture coarsely punctate, granulose, granules on elytra uniform, not large. Elytral disc convex with moderate slope towards the elytral apex.

Sternites black; blue-violet reflections appear closer to the epipleura and increase in size at the epipleura itself, giving the impression that the ventral surface of the body is also blue-violet. Epipleura always of bright metallic colors, from violet to blue-green.

Legs, mandibles, antennae, and palpi black.

Aedeagus (Figs 26-28). Median lobe moderately arcuate, middle portion beginning almost from the base with abrupt expansion. Middle portion with slight thickening medially. Apical lamella elongate, thin, slightly pointed, its apex rounded.

Differential diagnosis. Differences of *C.* (*P.*) *s. aksaraicus* **ssp. n.** from *C.* (*P.*) *s. estegeicus* Cavazzuti, 1989.

Aedeagus slightly less curved. Middle portion shorter and thicker. Apical portion longer and slightly more curved.

Taxon slightly smaller in size. Antennal length approximately the same. Pronotum width approximately the same, but pronotum length smaller, PW/PL is larger, which shows that the pronotum shape is more transverse. EW/EL larger, which indicates that the taxon is more globose. Beetles with brighter violet and blue-violet coloration.

Differences of *C.* (*P.*) *s. aksaraicus* **ssp. n.** from *C.* (*P.*) *syriacus kozloviorum* Cavazzuti & Kozlov, 2014.

Aedeagus more curved. Aedeagus base shorter and thicker. Middle portion shorter and thicker. Apical portion slightly longer and more curved.

Elytral width smaller. EW/EL in males and females slightly smaller, which indicates that the beetle is less globose. PW slightly larger and PL slightly smaller; the PW/PL ratio in both sexes is larger, indicating a more transverse pronotum shape. PM value on average larger. In some specimens of the new subspecies, PL/PM is less than 1; in *C.* (*P.*) *syriacus kozloviorum* this ratio is not noted as less than 1.

In most studied specimens of *C.* (*P.*) *s. aksaraicus* **ssp. n.,** PM≥PL, whereas in all studied specimens of *C.* (*P.*) *syriacus kozloviorum*, PL≥PM.

In males and females of *C.* (*P.*) *syriacus kozloviorum*, the elytral base has a humeral expansion, whereas in *C.* (*P.*) *s. aksaraicus* **ssp. n.** the elytral base forms a smooth curve without such expansion.

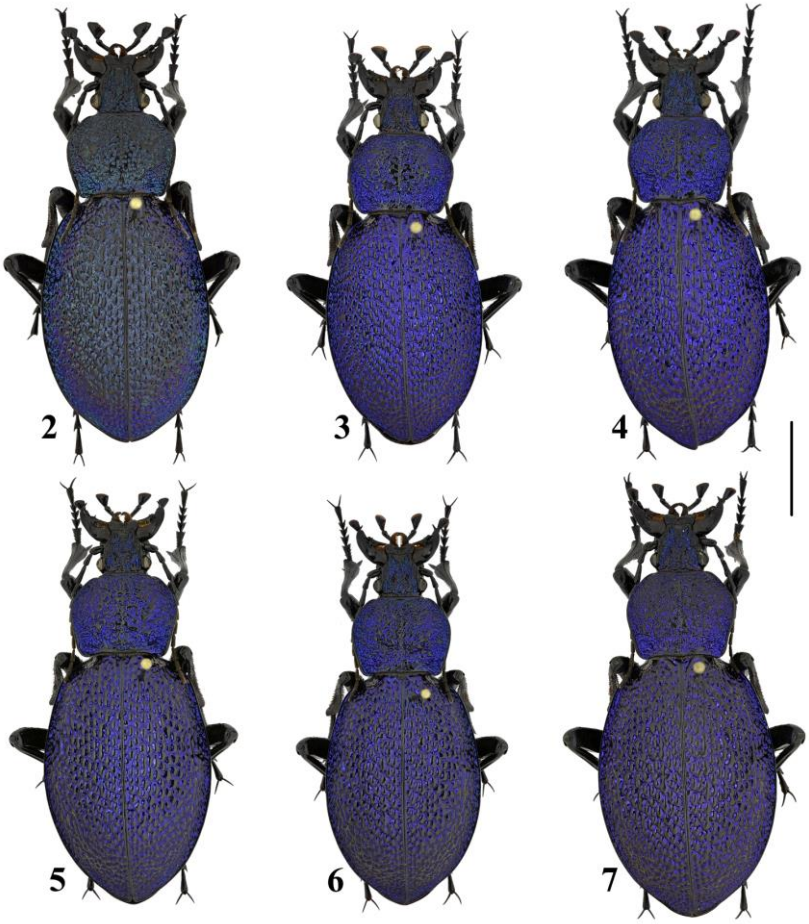
Based on known records, *C.* (*P.*) *syriacus kozloviorum* lives at altitudes from 1600 m a.s.l. and higher, whereas *C.* (*P.*) *s. aksaraicus* **ssp. n.** lives at altitudes from 980 to 1080 m a.s.l. Brighter violet-blue, rarely with green tints.

Material. Holotype ♂ (AK, Fig. 3), Turkey, Central Anatolia region, Aksaray province, Aksaray city environs, Melendiz River valley, H=1010 m a.s.l., V/2025, A. Kozlov leg. Paratypes: 23 ♂♂, 14 ♀♀ (AK, ZISP, ZMMU), the same data as holotype; 17 ♂♂, 8 ♀♀ (AK), Turkey, Central Anatolia region, Aksaray province, Aksaray city environs, Melendiz River valley, H=980-1080 m a.s.l., V/2025, D. Fominykh & A. Tatulyan leg.; 2 ♂♂ (AK), Turkey, Central Anatolia region, Aksaray province, Aksaray city environs, Melendiz River valley, H=980-1080 m a.s.l., V/2013, A. Kozlov & R. Gortovanny leg.; 2 ♂♂ (AK), Turkey, Central Anatolia region, Aksaray province, Aksaray city environs, 21/VI/1990, P. Cavazzuti leg.

Distribution and habitat. The new subspecies (Fig. 41) occurs in the immediate vicinity of Aksaray city, distributed along the entire Melendiz River valley from the city boundary to Mamasun Dam Lake, as well as in adjacent gorges where water sources support vegetation (Fig. 39). The surroundings of Aksaray represent an arid landscape where natural vegetation has been preserved primarily along the river valley and in gorges with springs and streams. The distribution of this new subspecies is primarily determined by the presence of grape snails, which constitute its main food source and are associated with green vegetation (Fig. 40). The studied specimens were collected directly in the river valley, outside

settlements, at elevations from 980 to 1080 m a.s.l.

Etymology. This subspecies is named after the type locality where first specimens were collected.



Figs 2-7. Dorsal habitus of *C.* (*P.*) *scabrosus aksaraicus* **ssp. n.:** 3. Holotype, male; 2, 4. Paratypes, males, with the same label as holotype; 5-7. Paratypes, females, with the same label as holotype. Scale bar: 10.0 mm.

***Carabus* (*Procerus*) *scabrosus anahitae* Kozlov, ssp. n.**
Figs 8-13

Description. TBL: ♂♂ 38.8-44.0 mm; ♀♀ 44.2-49.6 mm. EL: ♂♂ 23.9-27.3 mm; ♀♀ 27.4-31.3 mm. EW: ♂♂ 15.3-17.4 mm; ♀♀ 18.5-20.2 mm. PW: ♂♂ 10.7-12.5 mm; ♀♀ 11.7-13.1 mm. PL: ♂♂ 8.4-9.3 mm; ♀♀ 9.1-10.0 mm. PM: ♂♂ 8.0-9.0 mm; ♀♀ 8.7-10.0 mm. EW/EL: ♂♂ 0.63-0.68; ♀♀ 0.62-0.68. PW/PL: ♂♂ 1.20-1.34; ♀♀ 1.17-1.34. PL/PM: ♂♂ 1.00-1.11; ♀♀ 0.96-1.12.

Large taxon, body length of males 38.8-44.0 mm, body length of females 44.2-49.6 mm. Elytral width at the broadest part in males 15.3-17.4 mm; in females 18.5-20.2 mm.

Ventral surface of body black, with pronounced metallic luster laterally; dorsal surface with metallic luster, color usually dark violet, rarely blue-violet.

Head large, broad, surface with coarse rugose punctuation and deep longitudinal grooves.

Ventral surface of head in almost all specimens black, only in some specimens mentum and eye bases blue-violet.

Mandibles well developed, smooth. Mandible apices moderately curved.

Antennae in males and females longer than pronotum by 2.5-3 apical segments.

Median tooth of mentum acute, of moderate length.

Pronotum transverse (in males PW/PL = 1.20-1.34; in females PW/PL = 1.17-1.34), with coarse rugose punctuation. Pronotal margin beaded and more clearly defined towards the basal part. The pronotal base wider than the anterior part. Basal foveae clearly defined, connected by a light impression. Ventral surface of pronotum from blue-violet to blue-green metallic color, prosternal process smooth and black, but closer to the neck a violet luster appears.

Mesosternum black with violet tint. Mesepisternum and mesepimeron, as well as metepisternum, entirely metallic, varying in violet hues. Median line of pronotum in most males completely absent or barely indicated; in all females barely indicated.

Elytra moderately broad, convex, short, ovate, elytral apex

rounded. Elytral sculpture coarsely punctate, granulose, granules on elytra uniform, not large. Elytral disc convex with moderate slope towards the elytral apex.

Sternites black; violet reflections appear closer to the epipleura and increase in size at the epipleura itself, giving the impression that the ventral surface of the body is also violet. Epipleura always of metallic blue-violet colors.

Legs, mandibles, antennae, and palpi black.

Aedeagus (Figs 29-31). Median lobe moderately arcuate, middle portion short, beginning at some distance from the base with gradual expansion, moderate thickening visible medially. Apical lamella elongate, thin, slightly pointed, its apex rounded.

Differential diagnosis. Differences of *C.* (*P.*) *s. anahitae* **ssp. n.** from *C.* (*P.*) *s. aksaraicus* **ssp. n.**

Aedeagus base thinner, middle portion of aedeagus shorter. Apical portion of aedeagus less curved. *C.* (*P.*) *s. anahitae* **ssp. n.** has darker violet hues than *C.* (*P.*) *s. aksaraicus* **ssp. n.**

Elytral width in males smaller, therefore visually males appear smaller and narrower; in females, conversely, elytral width larger, therefore visually females appear larger. Pronotum width approximately the same in both sexes.

Pronotum margins more strongly rounded. Elytral disc more gradually slopes towards the apex.

Antennae in males shorter relative to the pronotum (exceeding it by 2.5-3 apical segments in *C.* (*P.*) *s. anahitae* **ssp. n.** vs. 3-3.5 in *C.* (*P.*) *s. aksaraicus* **ssp. n.**), whereas in females slightly longer (2.5-3 vs. 2-2.5 segments). In all studied specimens of *C.* (*P.*) *s. anahitae* **ssp. n.**, basal foveae of the pronotum connected by a light impression, but in *C.* (*P.*) *s. aksaraicus* **ssp. n.** not all specimens have such an impression between the basal foveae. In all studied males and most females of *C.* (*P.*) *s. anahitae* **ssp. n.**, PL≥PM, whereas in *C.* (*P.*) *s. aksaraicus* **ssp. n.** in most studied males and females PM≥PL.

Differences of *C.* (*P.*) *s. anahitae* **ssp. n.** from *C.* (*P.*) *syriacus kozloviorum* Cavazzuti & Kozlov, 2014.

Aedeagus more strongly curved. Aedeagus base thinner. Middle portion of aedeagus shorter and thicker.

Apical portion longer and less curved.

Elytra narrower. EW/EL ratio in males and females smaller -

visually beetles are narrower in appearance. Pronotum length smaller. EL, EW, PW, PM in females, on average, larger.

In all studied males and most females of *C.* (*P.*) *s. anahitae* **ssp. n.**, PL≥PM. In all studied males and females of *C.* (*P.*) *syriacus kozloviorum*, PL≥PM.

In males and females of *C.* (*P.*) *syriacus kozloviorum*, the elytral base has a humeral expansion, whereas in *C.* (*P.*) *s. anahitae* **ssp. n.** the elytral base forms a smooth curve without such expansion.

Based on known records, *C.* (*P.*) *syriacus kozloviorum* lives at altitudes from 1600 m a.s.l. and higher, whereas *C.* (*P.*) *s. anahitae* **ssp. n.** lives at altitudes from 1200 to 1420 m a.s.l. Color of *C.* (*P.*) *syriacus kozloviorum* darker: dark-violet tones with black.

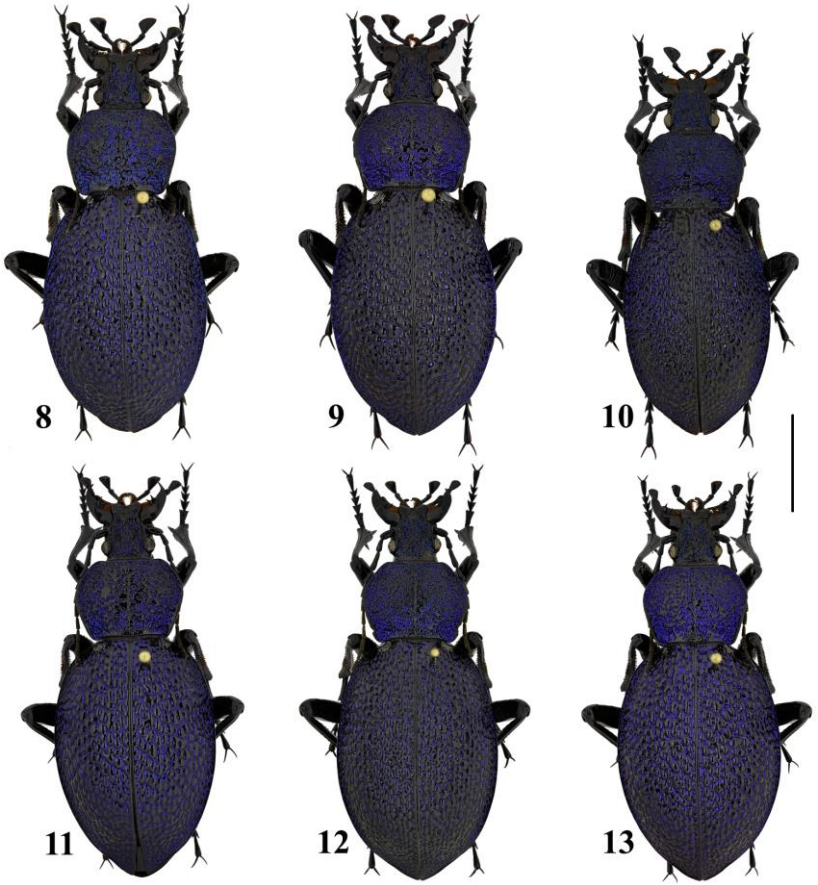
Differences of *C.* (*P.*) *s. anahitae* **ssp. n.** from *C.* (*P.*) *s. estegeicus* Cavazzuti, 1989.

Aedeagus less curved. Aedeagus base thinner and longer. Middle portion shorter and thicker. Apical portion longer and slightly more curved. Taxon smaller in size. Antennae shorter. Pronotum width approximately the same, but pronotum length smaller, the PW/PL ratio is larger, showing that the pronotum shape is more transverse. EW/EL larger, which indicates that the beetle is more globose. Coloration darker, in violet tones.

Material. Holotype ♂ (AK, Fig. 8), Turkey, Central Anatolia region, Niğde province, Niğde city environs, at the foot of Melendiz Mt. on the SE side, H=1245 m a.s.l., V/2025, A. Kozlov & R. Gortovanny leg. Paratypes: 27 ♂♂, 14 ♀♀ (AK, ZISP, ZMMU), the same data as holotype; 7 ♂♂ (DF), Turkey, Central Anatolia region, Niğde province, Niğde city environs, near Hançerli village, H=1420 m a.s.l., 17/IV/2025, D. Fominykh & A. Tatulyan leg.; 12 ♂♂, 7 ♀♀ (DF), Turkey, Central Anatolia region, Niğde province, Niğde city environs, H=1200 m a.s.l., 30/IV/2025, D. Fominykh & A. Tatulyan leg.

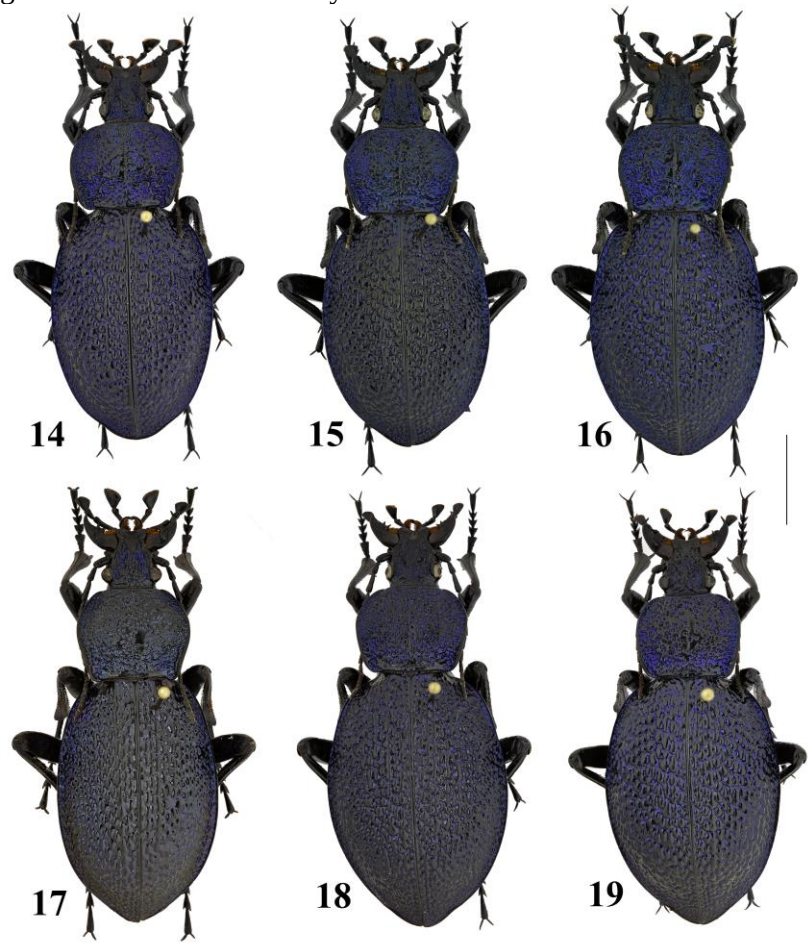
Distribution and habitat. The new subspecies occurs within Niğde city and its immediate environs, at the foot of Melendiz Mt. on the SE side. The surroundings of Niğde represent an arid landscape, where natural vegetation has been preserved primarily in gorges with springs and streams, as well as near human settlements historically associated with water sources (Figs 42, 43). Consequently, the beetles (Fig. 44) have become almost synanthropic, inhabiting rural and semi-rural areas in close association with humans. The new

subspecies occurs in fruit and vegetable gardens and city parks, where vegetated areas support abundant grape snail populations, which constitute the primary food source for this new subspecies. The high concentration of snails and the presence of natural and artificial shelters - such as numerous stone walls separating neighboring areas and gardens - make these settlements favorable for maintaining a viable population of the new subspecies. The studied specimens were collected at elevations from 1200 to 1420 m a.s.l.



Figs 8-13. Dorsal habitus of *C.* (*P.*) *s. anahitae* **ssp. n.**: 8. Holotype, male; 9-10. Paratypes, males, with the same label as holotype; 11-13. Paratypes, females, with the same label as holotype. Scale bar: 10.0 mm.

Etymology. The subspecific epithet refers to one of the ancient names of the modern city of Niğde (the type locality), which derives from the epithet Anahita ("immaculate") of the ancient Iranian goddess of water and fertility Aredvi Sura Anahita.



Figs 14-19. Dorsal habitus of *C.* (*P.*) *syriacus kozloviorum* Cavazzuti & Kozlov, 2014: 14-16. Males, Turkey, Central Anatolia region, Niğde province, Ulukışla town environs, H=1600 m a.s.l., V/2025, A. Kozlov & R. Gortovanny leg.; 18-19. Females, with the same label; **17.** *C.* (*P.*) *scabrosus estegeicus* Cavazzuti, 1989: Male, Turkey, Isparta province, Isparta district, Davraz Dağı, 20/V/1997, R. Minetti coll. Scale bar: 10.0 mm.

A.O. Kozlov

***Carabus* (*Procerus*) *scabrosus lyciacus* Kozlov, ssp. n.**
Fig. 20

Description. TBL: 45.5 mm. EL: 27.4 mm. EW: 19.0 mm. PW: 12.0 mm. PL: 10.0 mm. PM: 9.5 mm. EW/EL: 0.69. PW/PL: 1.20. PL/PM: 1.05.

Taxon of large size, stout shape, body length of male 45.5 mm, elytral width at the broadest part in the male 19.0 mm.

Ventral surface of body black, with pronounced metallic luster laterally; the last three sternites with blue-violet longitudinal grooves. Dorsal surface with metallic luster, color usually bright violet. Head large and broad, surface with coarse rugose punctuation and deep longitudinal grooves.

Ventral surface of head black, but mentum and eye bases blue-violet.

Mandibles well developed, smooth. Mandible apices moderately curved.

Antennae in the male longer than pronotum by 3-3.5 apical segments.

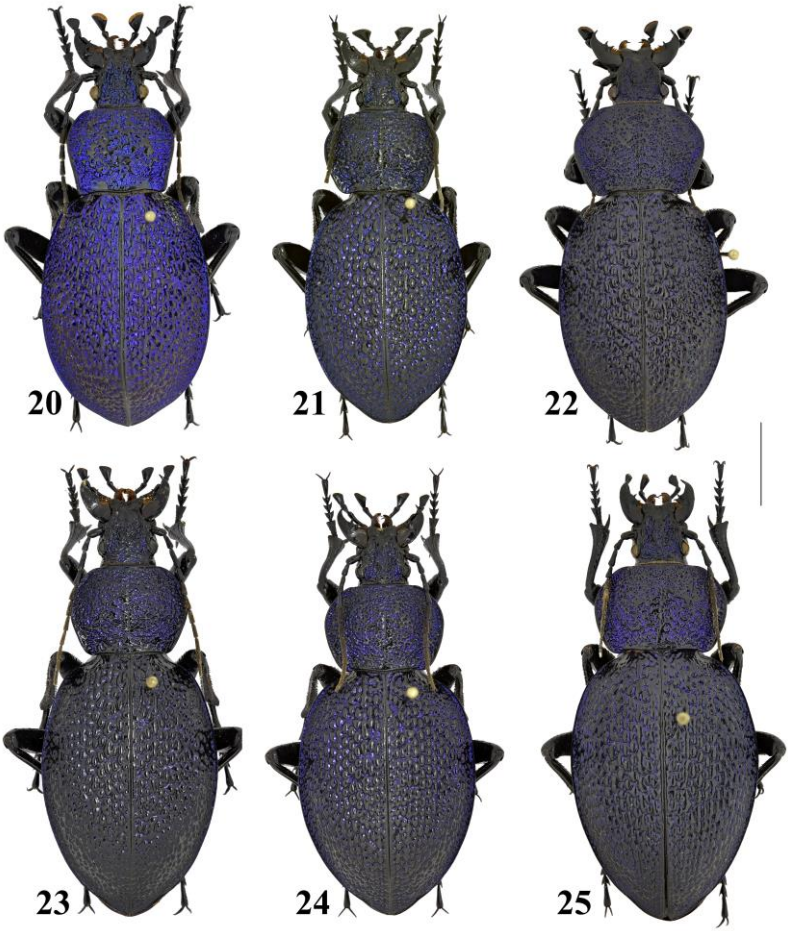
Median tooth of mentum acute, elongate.

Pronotum subquadrate (PW/PL = 1.20), with coarse rugose punctuation. Pronotal margin beaded and more clearly defined towards the basal part. Pronotum rounded only at the anterior part, with almost straight margins extending to the pronotum base. Base wider than the anterior part. Basal foveae clearly impressed, connected by a barely visible impression. Ventral surface of pronotum blue-violet, prosternal process smooth and black, but closer to the neck a blue-violet luster appears.

Mesosternum black with violet tint. Mesepisternum and mesepimeron, as well as metepisternum, entirely metallic, color varying in blue-violet hues. Median line of pronotum absent.

Elytra broad, convex, short, ovate, elytral apex rounded. Elytral disc convex with steep slope towards the elytral apex. Elytral sculpture coarsely punctate, granulose, granules on elytra uniform, large. Sternites black, with intense blue-violet reflections along the margins and distinct longitudinal blue-violet grooves medially on each of the last three sternites; reflections increase in size at the epipleura, giving the impression that the ventral surface of the body is violet. Epipleura of metallic blue-violet colors.

Legs, mandibles, antennae, and palpi black.



Figs 20-25. 20. Dorsal habitus of *C.* (*P.*) *scabrosus lyciacus* **ssp. n.**: Holotype, male. **21, 24.** Dorsal habitus of *C.* (*P.*) *syriacus ludademae* Cavazzuti & Kozlov, 2014: 21. Male, Turkey, Central Anatolia region, Karaman province, Karaman city environs, IV-V/2022, local people leg.; 24. Female, with the same label. **22, 25.** *C.* (*P.*) *syriacus toulgoetianus* Deuve, 2002: 22. Male, Turkey, Mediterranean region, Adana province, Karataş district, Çavuşlu village environs, V/2014, A. Kozlov & R. Gortovanny leg.; 25. Female, with the same label. **23.** *C.* (*P.*) *syriacus bulgharmaadensis* Bodemeyer, 1915: female, Turkey, Mediterranean region, Mersin province, Çamlıyayla district, near Sebil village, Cehennem Deresi Gorge, H=1080 m a.s.l., 30-31/V/2010, D. Kasatkin leg. Scale bar: 10.0 mm.

Aedeagus (Fig. 36). Median lobe moderately arcuate, middle portion elongate and beginning almost immediately from the base with gradual expansion. Thickness from beginning of expansion uniform throughout the middle portion. Apical lamella short, weakly curved, slightly pointed, its apex rounded.

Differential diagnosis. The described taxon was previously included by Cavazzuti in the type series of *Carabus* (*Procerus*) *scabrosus estegeicus*. In the Monograph by Cavazzuti (1989) on Plate IV, photo 5, the female in external characters is morphologically consistent with the male described in this article.

The new subspecies differs from known subspecies in its unique subquadrate pronotal shape, large size, stout build, and very bright violet color.

Differences of *C.* (*P.*) *s. lyciacus* **ssp. n.** from *C.* (*P.*) *s. estegeicus* Cavazzuti, 1989. The new subspecies has a subquadrate pronotum. Pronotum margins less rounded. PW and PL smaller. PM larger. PL/PM smaller.

Elytra wider and more rounded towards the apex - therefore the beetle appears more rounded, which is also confirmed by the larger EW/EL ratio. The new subspecies is bright violet, unlike the blue-violet of *C.* (*P.*) *s. estegeicus*.

Aedeagus slightly smaller, less curved, base thicker, middle portion shorter and slightly thicker, apical lamella less curved and shorter.

Differences of *C.* (*P.*) *s. lyciacus* **ssp. n.** from *C.* (*P.*) *syriacus ludademae* Cavazzuti & Kozlov, 2014. The new subspecies has a subquadrate pronotum. TBL slightly larger. PW/PL smaller. Pronotum margins less rounded. In the new subspecies, the elytra are sharply rounded towards the apex. Granules on elytra more regular, smaller.

Aedeagus more sharply curved, unlike the gradual curvature of the middle portion, base thicker and shorter, middle portion longer, thickness approximately the same, apical lamella less curved and shorter. Apical end thicker and slightly more curved. The new subspecies is bright violet, unlike dark violet specimens of *C.* (*P.*) *syriacus ludademae*.

Differences of *C.* (*P.*) *s. lyciacus* **ssp. n.** from *C.* (*P.*) *syriacus toulgoetianus* Deuve, 2002. The new subspecies has a subquadrate pronotum. PW parameter significantly smaller. PW/PL smaller.

Pronotum margins less rounded. TBL parameter approximately the same, elytral width the same, but the new subspecies with a more rounded elytral apex. EW/EL ratio in both subspecies is practically the same.

Granules on elytra more regular, smaller.

C. (*P.*) *s. lyciacus* **ssp. n.** is bright violet, unlike dark violet specimens of *C.* (*P.*) *syriacus toulgoetianus*.

Aedeagus more sharply curved, unlike the gradual curvature of the middle portion, base thicker and shorter, middle portion approximately the same length but slightly thicker, apical lamella less curved and shorter. Apical end thicker and slightly more curved.

Material. Holotype ♂ (AK, Fig. 20), Turkey, Mediterranean region, Muğla province, Seydikemer district, valley near the border of Seki town environs, H=1250 m a.s.l., 28/V-6/VI/2005, D. Prunier leg.

Other material. Monograph of Cavazzuti (1989), Plate IV, photo 5: *Carabus* (*Procerus*) *sommeri estegeicus*, paratypus ♀: "Anatolia Sud-occ., Muğla vil.: Nord di Kemer, V-1986, Lassalle leg." (coll. Lassalle).

Etymology. The subspecific epithet derives from the name of the ancient region of Lycia, in reference to the historical territory that once encompassed the type locality.

Acknowledgements. The author expresses deep gratitude to D.D. Fominykh (Moscow, Russia) for assistance in preparing and reviewing this article, for advice and critical comments, and for providing material for this publication. Deep appreciation is extended to R.S. Gortovanny (Zhukovsky, Russia) for assistance during field trips and for help in collecting material. Sincere thanks are due to A.P. Tatulyan (Essentuki, Russia) for providing material for this article, and to I.A. Zabaluev (Moscow, Russia) for assistance in photographing the aedeagi. The author also thanks K.S. Kirzha (Abu Dhabi, UAE) for assistance in preparing and translating this article into English.

Figs 26-37. Aedeagi of studied *Carabus* (*Procerus*): *scabrosus* ssp.: *aksaraicus* **ssp. n.** - 26-28; *anahitae* **ssp. n.** - 29-31; *estegeicus* - 35; *lyciacus* **ssp. n.** - 36. *syriacus* ssp.: *kozloviorum* - 32-34; *ludademae* – 37. Scale bar: 10.0 mm.

Subspecies	Sex	TBL, mm	EL, mm	EW, mm	PW, mm	PL, mm	PM, mm	EW/EL	PW/PL	PL/PM
ssp. *esfegeicus*	♂	45,0	27,4	17,6	12,2	10,1	9,0	0,64	1,21	1,12
ssp. *aksaraicus*	♂♂	40,0-44,5	24,2-27,7	16,0-18,0	10,4-13,0	8,0-9,5	7,7-10,0	0,63-0,69	1,22-1,38	0,94-1,10
	♀♀	44,5-47,0	28,0-29,2	18,3-19,3	11,7-13,1	9,2-10,0	9,0-10,2	0,65-0,68	1,21-1,31	0,98-1,05
ssp. *anahitae*	♂♂	38,8-44,0	23,9-27,3	15,3-17,4	10,7-12,5	8,4-9,3	8,0-9,0	0,63-0,68	1,20-1,34	1,00-1,11
	♀♀	44,2-49,6	27,4-31,3	18,5-20,2	11,7-13,1	9,1-10,0	8,7-10,0	0,62-0,68	1,17-1,34	0,96-1,12
ssp. *kozloviorum*	♂♂	38,6-44,5	23,6-27,0	15,6-19,0	10,5-12,4	8,7-10,0	8,0-9,0	0,67-0,71	1,20-1,33	1,00-1,15
	♀♀	44,0-47,1	28,0-29,0	18,8-19,7	11,0-12,8	9,0-10,5	9,0-9,6	0,67-0,70	1,20-1,22	1,00-1,09
ssp. *lyciacus*	♂	45,50	27,40	19,00	12,00	10,00	9,50	0,69	1,20	1,05
ssp. *ludademae*	♂♂	41,1-44,2	25,5-26,9	17,0-18,8	12,1-13,1	8,4-10,0	8,0-9,5	0,68-0,70	1,31-1,44	1,00-1,06
	♀	48	29,4	20,5	13,7	10	9,8	0,7	1,37	1,02
ssp. *toulgoetianus*	♂	46	27,7	19	14,7	11	9,6	0,69	1,34	1,15
	♀	49,8	30,7	21	14,8	10,2	10,4	0,68	1,45	0,98
ssp. *bulgharmaadensis*	♀	50,3	30,5	20	13	10,4	9,2	0,66	1,25	1,13

Fig. 38. Comparative size table of studied *Carabus* (*Procerus*) specimens.

Fig. 39. Habitat of *C.* (*P.*) *s. aksaraicus* **ssp. n.** Aksaray env., H=1010 m a.s.l.

Fig. 40. *C.* (*P.*) *s. aksaraicus* **ssp. n.**, copulating pair in natural habitat. Aksaray env., H=1010 m a.s.l.

Fig. 41. *C.* (*P.*) *s. aksaraicus* **ssp. n.** in nature. Aksaray env., H=1010 m a.s.l.

Fig. 42. Habitat of *C.* (*P.*) *s. anahitae* **ssp. n.** Niğde env., H=1245 m a.s.l.

Fig. 43. Habitat of *C.* (*P.*) *s. anahitae* **ssp. n.** Niğde env., H=1245 m a.s.l.

Fig. 44. *C.* (*P.*) *s. anahitae* **ssp. n.** in nature. Niğde env., H=1245 m a.s.l.

Fig. 45. Habitat of *C.* (*P.*) *syriacus kozloviorum*. Ulukışla env., H=1600 m a.s.l.

Fig. 46. *C.* (*P.*) *syriacus kozloviorum*, copulating pair in natural habitat. Ulukışla env., H=1600 m a.s.l.

Fig. 47. Habitat of *C.* (*P.*) *syriacus kozloviorum*. Ulukışla env., H=1600 m a.s.l.

REFERENCES

Avgin S.S. & Prunier D., 2007. Description d'une nouvelle sous-espèce de Procerus de Turquie méridionale. - Le Coléoptériste. 10 (2): 83-86.

Bodemeyer E. 1915. Procerus scabrosus und varietäten. - Deutsche Entomologische Zeitschrift. 5: 570-571.

Breuning S. 1932. Monographie der Gattung Carabus (1932-1936). - Bestimmungstabellen europäischer Coleopteren. 104-110: 1610 pp. Troppau.

Breuning S. 1975. Description de nouvelles sous-espèces du genre Carabus L. (s.l.) (Coléoptères, Carabidae, Carabinae). - Nouvelle Revue d'Entomologie. 5: 129-134.

Brezina B. 1999. World catalogue of the genus Carabus L. Sofia, Moscow: Pensoft Publishers, 170 pp.

Cavazzuti P. 1989. Monografia del Genere Procerus (Coleoptera, Carabidae, Carabini): Morfologia, sistematica, biologia, ecologia. Vol. 1. Associazione Naturalistica Piemontese Memoire, Edizione L'Artistica Savigliano. 200 pp.

Cavazzuti P. & Kozlov A. 2014. Nuove ed inattese sottospecie di Carabus (Procerus) dell'Anatolia meridionale. Descrizione di due nuovi taxa di Procerus bulgharmaadensis (Coleoptera, Carabidae). - Lambillionea. 114 (2): 147-152.

Cavazzuti P. 2017. Fauna dei Carabini di Turchia - III. - Magellanes. Collection systématique. 29: 7-32.

Csiki E. 1927. Carabidae: Carabinae (Partes 91 et 92). - In: Junk W. & Schenkling S. (eds.): Coleopterorum Catalogus. Volumen I. Carabidae I. Berlin, W. Junk. 621 pp.

Deuve Th. 1991. La nomenclature taxonomique du genre Carabus. Bibliothèque Entomologique, Vol. 4. Paris, Venette: Sciences Nat. éd., 198 pp.

Deuve Th. 1994. Une classification du genre Carabus. Bibliothèque Entomologique, Vol. 5. Paris, Venette: Sciences Nat. éd., 296 pp.

Deuve Th. 2002. Nouveaux taxons dans le genre Carabus L., 1758 (Coleoptera, Carabidae). - Coléoptères. 8 (19): 267-282.

Deuve Th. 2004. Illustrated Catalogue of the Genus Carabus of the World (Coleoptera: Carabidae). Pensoft Publishers. 461 pp.

Deuve Th. 2012. Une nouvelle classification du genre Carabus L. 1758. Liste Blumenthal 2011-2012. Association Magellanes, Andresy. 54 pp.

Deuve Th. 2014. Classification du genre Carabus L. 1758. Liste Blumenthal 2013-2015. Association Magellanes.

Deuve Th. 2021. Carabus of the World. - Conflans-Sainte-Honorine:

Magellanes, Collection Systématique. Vol. 30. 651 pp.

Kashima K. 2002. Environmental and climatic changes during the last 20,000 years at Lake Tuz, central Turkey. - Catena. 48: 3-20.

Kollar V. 1843. L. Redtenbacher, Bemerkungen über die in Syrien von Theodor Kotschy gesammelten Käfer, in Russegger J., Reisen in Europa, Asien und Afrika. Erster Band, zweiter Teil, Stuttgart. Abschnitt: Naturhistorischer Anhang (Zoologie, Entomologie): 980-981.

Korell A. 1985. Zwei neue Procerus und Carabus formen aus der südlichen Türkei (Col.: Carabidae). - Entomologische Zeitschrift. 95 (10): 140-142.

Korell A. 1988a. Ein bemerkenswerter Fund von Procerus syriacus Kollar 1843 in der Provinz Hatay, Türkei (Coleoptera, Carabidae). - Entomologische Zeitschrift. 98 (7): 92-95.

Korell A. 1988b. Beschreibung des Procerus limitaneus n. ssp. (Coleoptera: Carabidae). - Entomologische Zeitschrift. 98 (12): 176.

Lassalle B. 1990. Carabes d'Anatolie. - Bulletin Sciences Naturelles. 63: 2-3.

Received: 02.03.2026
Accepted: 15.04.2026

О ЖУРНАЛЕ

Гуманитарное пространство (Гуманитарное пространство. Международный альманах = Humanity space. International almanac) издается с 2012 года. Публикуются статьи, являющиеся результатом научных исследований. К печати принимаются оригинальные исследования, содержащие новые, ранее не публиковавшиеся результаты, обзоры, аналитические и концептуальные разработки по конкретным проблемам гуманитарных и естественных наук.

Издание зарегистрировано в Международном Центре ISSN в Париже (идентификационный номер печатной версии: ISSN 2226-0773).

Выходит 4 номера в год, а так же дополнения в виде приложения к журналу.

Альманах представлен во многих базах данных и каталогах: Zoological Record (Web of Science), ZooBank, EBSCO, ERIH PLUS, Index Copernicus International, Genamics JournalSeek, Google Scholar, Интеллектуальная система тематического исследования наукометрических данных (ИСТИНА), Российский индекс научного цитирования (РИНЦ), КиберЛенинка (Cyberleninka) и др.

ABOUT THE JOURNAL

Humanity space (Гуманитарное пространство. Международный альманах = Humanity space. International almanac) has been published since 2012. Articles that are the result of scientific research are published. Texts could be original researches, containing new, previously unpublished results, surveys, analytical and conceptual manuscripts on specific issues of the humanities and natural sciences.

Publication is registered in the ISSN International Centre in Paris (identification number printed version: ISSN 2226-0773).

There are 4 issues per year, as well as supplements in the form of an appendix to the journal.

Almanac is presented in many databases and directories: Zoological Record (Web of Science), ZooBank, EBSCO, ERIH PLUS, Index Copernicus International, Genamics JournalSeek, Google Scholar, Intellectual System of the Thematic Research of Scientific Metric Data (ISTINA), Russian Science Citation Index (RSCI), Cyberleninka etc.

Содержание // Contents

Козлов А.О. Описание трех новых подвидов *Carabus* (*Procerus*) *scabrosus* Olivier, 1789 из Центральной и Средиземноморской Турции (Coleoptera, Carabidae)

Kozlov A.O. Description of three new subspecies of *Carabus* (*Procerus*) *scabrosus* Olivier, 1789 from Central and Mediterranean Turkey (Coleoptera, Carabidae)…… 182

О ЖУРНАЛЕ / ABOUT THE JOURNAL…… 209